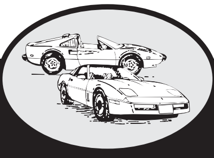
THE AUTOMOTIVE EDGE™

06.09

The Official Publication of the
NATIONAL LOCKSMITH
AUTOMOBILE ASSOCIATION™

2006 Nissan Altima



Issue
No. 100

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Online Store, Tech Support

www.Laserkey.com
Product & Technology Sales,
Transponder Information Resources

The Nissan Altima has been a popular auto since its introduction in 1993. During the years from 2000 to 2004, the Altima embraced a transponder option, which complicated key making for the locksmith. During these years, the Altima transponder system required a P.I.N. number to program a first key or introduce a second key to the vehicle. The P.I.N. number, however, was common to all Altima models. 2005 and 2006 models found increased security by making the P.I.N. number unique to each vehicle. The P.I.N. number is presently coded into a serial number found on the security module.

2006 Altima models will not find lock cylinders in the rear deck and passenger door. There are three keyed lock cylinders on this vehicle. They are; the ignition, drivers' door and glove box cylinders. One key operates all cylinders, and there does not appear to be a "valet" function. The ignition and door lock cylinders employ a "stepped wafer ear" configuration that complicates or prevents conventional reading of the wafers in the keyway.

The vehicle used in this article had no key, and the drivers' door cylinder was vandalized. Someone had tried, unsuccessfully, to force the door cylinder with a screwdriver. The job was to repair the door cylinder and make a first key.

National Locksmith Automobile Association™

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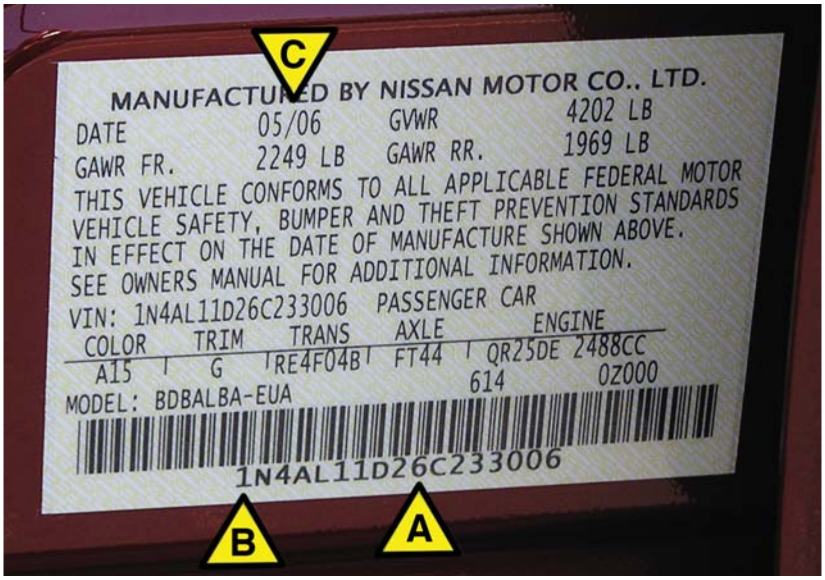
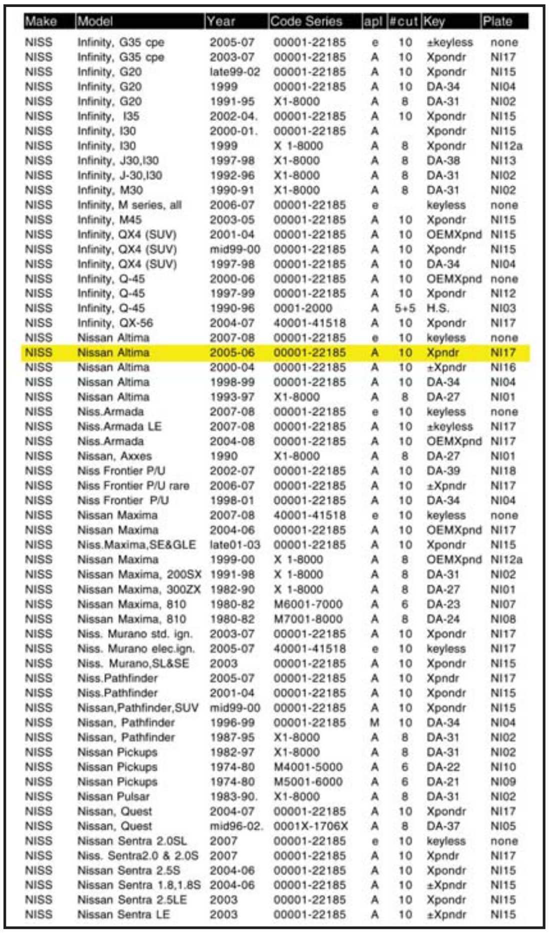


MANUFACTURED BY NISSAN MOTOR CO., LTD.
DATE 05/06 GVWR 4202 LB
GAWR FR. 2249 LB GAWR RR. 1969 LB
THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY, BUMPER AND THEFT PREVENTION STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE.
SEE OWNERS MANUAL FOR ADDITIONAL INFORMATION.
VIN: 1N4AL11D26C233006 PASSENGER CAR
COLOR TRIM TRANS AXLE ENGINE
A15 G RE4F04B FT44 QR25DE 2488CC
614 0Z000
MODEL: BDBALBA-EUA
1N4AL11D26C233006

1. The first step to any service request is to locate the correct information on the vehicle at hand. In the lower rear corner of the drivers door channel is a manufacturer's information label. The label will contain three important pieces of information for the locksmith. The model year of the vehicle is indicated by the tenth digit of the V.I.N. (Vehicle Identification Number). The V.I.N. number will also be found on a metal tag in the lower left corner of the front window. The tenth digit of the V.I.N., at "A" is "6," which identifies this vehicle as a 2006 model. The first digit of the V.I.N. identifies the country of origin. In this case, the first digit, at "B" is a "1," indicating that the vehicle was assembled in the continental United States. The date of manufacture is shown at "C" in the photo. This information is helpful when mid-year changes within a model are indicated. The vehicle was assembled in May of 2006. Armed with this information, we can find further information in the index of Fast Facts.



Make	Model	Year	Code Series	apl	#cut	Key	Plate
NISS	Infinity, G35 cpe	2005-07	00001-22185	e	10	±keyless	none
NISS	Infinity, G35 cpe	2003-07	00001-22185	A	10	Xpondr	NI17
NISS	Infinity, G20	late99-02	00001-22185	A	10	Xpondr	NI15
NISS	Infinity, G20	1999	00001-22185	A	10	DA-34	NI04
NISS	Infinity, G20	1991-95	X1-8000	A	8	DA-31	NI02
NISS	Infinity, I35	2002-04.	00001-22185	A	10	Xpondr	NI15
NISS	Infinity, I30	2000-01.	00001-22185	A		Xpondr	NI15
NISS	Infinity, I30	1999	X 1-8000	A	8	Xpondr	NI12a
NISS	Infinity, J30,I30	1997-98	X1-8000	A	8	DA-38	NI13
NISS	Infinity, J-30,I30	1992-96	X1-8000	A	8	DA-31	NI02
NISS	Infinity, M30	1990-91	X1-8000	A	8	DA-31	NI02
NISS	Infinity, M series, all	2006-07	00001-22185	e		keyless	none
NISS	Infinity, M45	2003-05	00001-22185	A	10	Xpondr	NI15
NISS	Infinity, QX4 (SUV)	2001-04	00001-22185	A	10	OEMXpnd	NI15
NISS	Infinity, QX4 (SUV)	mid99-00	00001-22185	A	10	Xpondr	NI15
NISS	Infinity, QX4 (SUV)	1997-98	00001-22185	A	10	DA-34	NI04
NISS	Infinity, Q-45	2000-06	00001-22185	A	10	OEMXpnd	none
NISS	Infinity, Q-45	1997-99	00001-22185	A	10	Xpondr	NI12
NISS	Infinity, Q-45	1990-96	0001-2000	A	5+5	H.S.	NI03
NISS	Infinity, QX-56	2004-07	40001-41518	A	10	Xpondr	NI17
NISS	Nissan Altima	2007-08	00001-22185	e	10	keyless	none
NISS	Nissan Altima	2005-06	00001-22185	A	10	Xpndr	NI17
NISS	Nissan Altima	2000-04	00001-22185	A	10	±Xpndr	NI16
NISS	Nissan Altima	1998-99	00001-22185	A	10	DA-34	NI04
NISS	Nissan Altima	1993-97	X1-8000	A	8	DA-27	NI01
NISS	Niss.Armada	2007-08	00001-22185	e	10	keyless	none
NISS	Niss.Armada LE	2007-08	00001-22185	A	10	±keyless	NI17
NISS	Niss.Armada	2004-08	00001-22185	A	10	OEMXpnd	NI17
NISS	Nissan, Axxes	1990	X1-8000	A	8	DA-27	NI01
NISS	Niss Frontier P/U	2002-07	00001-22185	A	10	DA-39	NI18
NISS	Niss Frontier P/U rare	2006-07	00001-22185	A	10	±Xpndr	NI17
NISS	Niss Frontier P/U	1998-01	00001-22185	A	10	DA-34	NI04
NISS	Nissan Maxima	2007-08	40001-41518	e	10	keyless	none
NISS	Nissan Maxima	2004-06	00001-22185	A	10	OEMXpnd	NI17
NISS	Niss.Maxima,SE&GLE	late01-03	00001-22185	A	10	Xpondr	NI15
NISS	Nissan Maxima	1999-00	X 1-8000	A	8	OEMXpnd	NI12a
NISS	Nissan Maxima, 200SX	1991-98	X 1-8000	A	8	DA-31	NI02
NISS	Nissan Maxima, 300ZX	1982-90	X 1-8000	A	8	DA-27	NI01
NISS	Nissan Maxima, 810	1980-82	M6001-7000	A	6	DA-23	NI07
NISS	Nissan Maxima, 810	1980-82	M7001-8000	A	8	DA-24	NI08
NISS	Niss. Murano std. ign.	2003-07	00001-22185	A	10	Xpondr	NI17
NISS	Niss. Murano elec.ign.	2005-07	40001-41518	e	10	keyless	NI17
NISS	Niss. Murano,SL&SE	2003	00001-22185	A	10	Xpondr	NI15
NISS	Niss.Pathfinder	2005-07	00001-22185	A	10	Xpndr	NI17
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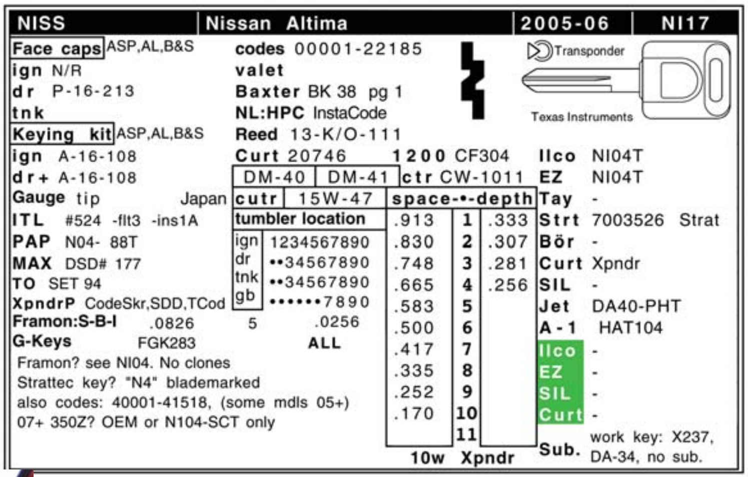
NISS	Nissan, Pathfinder	1996-99	00001-22185	M	10	DA-34	NI04
NISS	Nissan, Pathfinder	1987-95	X1-8000	A	8	DA-31	NI02
NISS	Nissan Pickups	1982-97	X1-8000	A	8	DA-31	NI02
NISS	Nissan Pickups	1974-80	M4001-5000	A	6	DA-22	NI10
NISS	Nissan Pickups	1974-80	M5001-6000	A	6	DA-21	NI09
NISS	Nissan Pulsar	1983-90.	X1-8000	A	8	DA-31	NI02
NISS	Nissan, Quest	2004-07	00001-22185	A	10	Xpondr	NI17
NISS	Nissan, Quest	mid96-02.	0001X-1706X	A	8	DA-37	NI05
NISS	Nissan Sentra 2.0SL	2007	00001-22185	e	10	keyless	none
NISS	Niss. Sentra2.0 & 2.0S	2007	00001-22185	A	10	Xpndr	NI17
NISS	Nissan Sentra 2.5S	2004-06	00001-22185	A	10	Xpondr	NI15
NISS	Nissan Sentra 1.8,1.8S	2004-06	00001-22185	A	10	±Xpndr	NI15
NISS	Nissan Sentra 2.5LE	2003	00001-22185	A	10	Xpondr	NI15
NISS	Nissan Sentra LE	2003	00001-22185	A	10	±Xpndr	NI15

2. Nissan Altima is found, in the INDEX, under the manufacturer heading "Nissan," at the model heading "Altima." The model years 2005-06 used code series 00001-22185. One key fits all locks. An "e" in the "application" column indicates "emergency" access only. An "M" in this position would indicate that there is a master/valet system in place. The vehicle is "Xpndr," transponder equipped on all vehicles. A "±Xpndr" label would indicate that the transponder was optional. Further specific information will be found at Key Plate NI17.

3. Key Plate NI17 contains key cutting information, tumbler locations, and information necessary to make a key for this vehicle. For now, we need to find the correct key blank and work key. The Strattec 7003526 or ILCO NI04T super chip key is indicated as the proper transponder to satisfy this vehicle. We will use "work key" X237 to make the first mechanical key. This will avoid the possibility of miss-cutting an expensive transponder blank. The table of tumbler locations shows the door and trunk cylinder to contain combinating wafers in positions 3-10. The 2006 models will not have a trunk cylinder, but this Key Plate is made to service the 2005 and 2006 models. Life was a lot simpler when we could open the trunk to remove the cylinder to find the cuts in positions 3-10.


Transponder
Texas Instruments

NISS | **Nissan Altima** | **2005-06** | **NI17**

Face caps ASP,AL,B&S
ign N/R
dr P-16-213
tnk
Keying kit ASP,AL,B&S
ign A-16-108
dr+ A-16-108
Gauge tip Japan
ITL #524 -flt3 -ins1A
PAP N04- 88T
MAX DSD# 177
TO SET 94
XpndrP CodeSkr,SDD,TCod
Framon:S-B-I .0826 5 .0256
G-Keys FGK283 **ALL**
Framon? see NI04. No clones
Strattec key? "N4" blademarked
also codes: 40001-41518, (some mdls 05+)
07+ 350Z? OEM or N104-SCT only

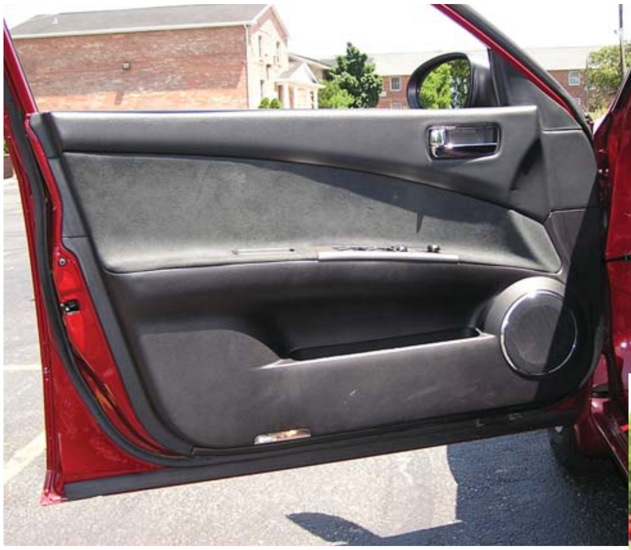
codes 00001-22185
valet
Baxter BK 38 pg 1
NL:HPC InstaCode
Reed 13-K/O-111
Curt 20746 **1200** CF304
DM-40 | DM-41 | **ctr** CW-1011
cutr 15W-47

tumbler location	
ign	1234567890
dr	••34567890
tnk	••34567890
gb	••••••7890

space-•-depth		
.913	**1**	.333
.830	**2**	.307
.748	**3**	.281
.665	**4**	.256
.583	**5**	
.500	**6**	
.417	**7**	
.335	**8**	
.252	**9**	
.170	**10**	
	11	

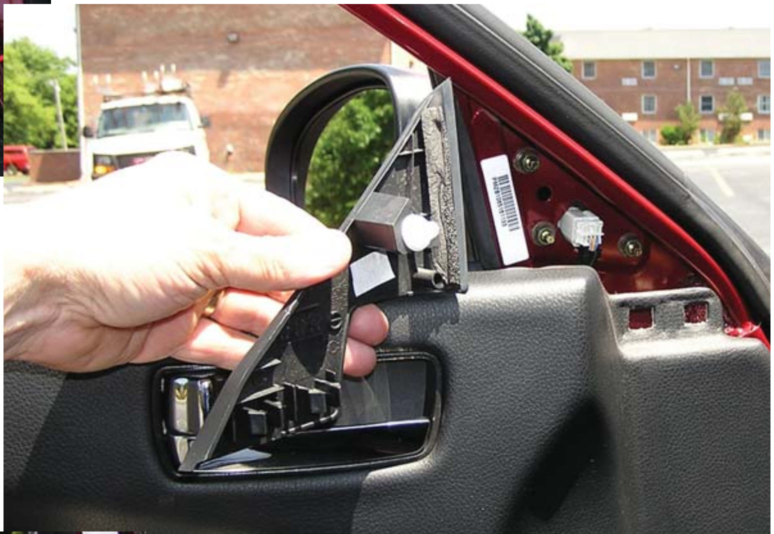
10w Xpndr

Ilco NI04T
EZ NI04T
Tay -
Strt 7003526 Strat
Bör -
Curt Xpndr
SIL -
Jet DA40-PHT
A-1 HAT104
Ilco -
EZ -
SIL -
Curt -
Sub. work key: X237, DA-34, no sub.

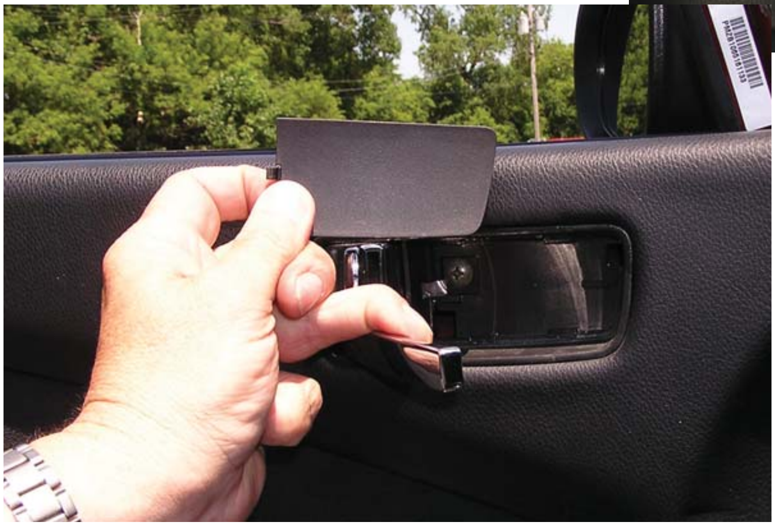


Door Lock

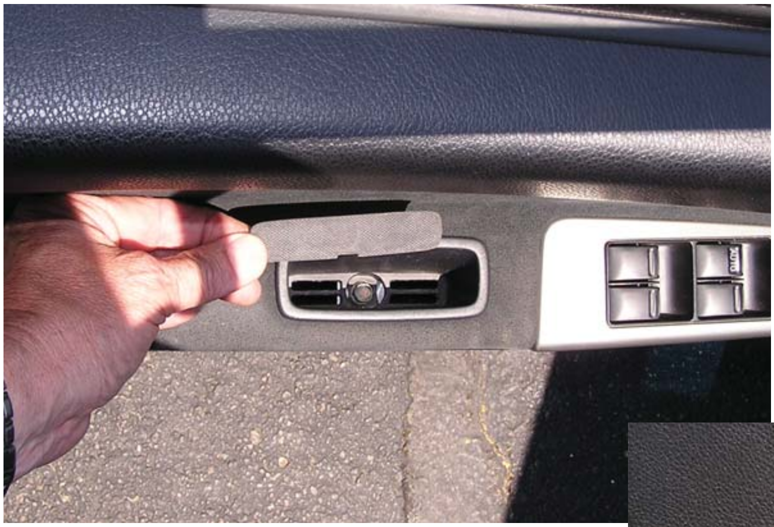
4. The inside trim for the drivers door. There are no exposed trim screws. The panel is attached by a number of concealed threaded fasteners and friction posts.



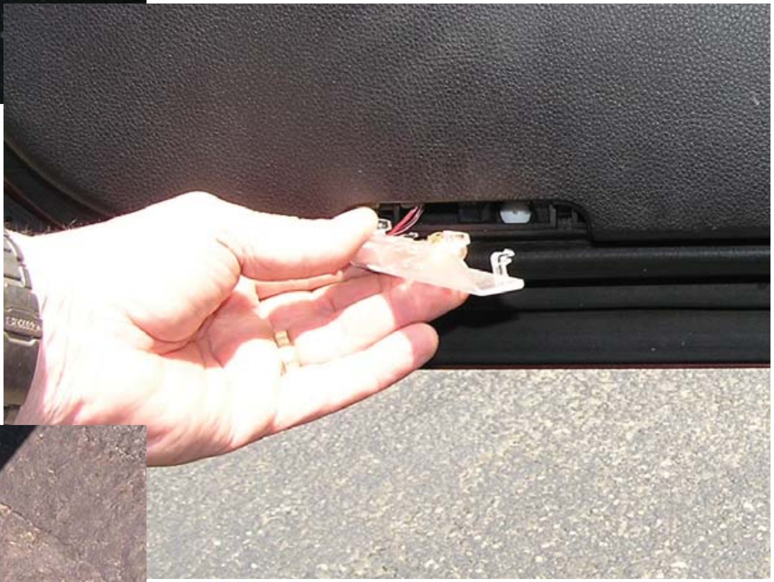
5. The "nose trim" is attached by a single friction post. Gently pry the top rear corner of the nose trim away from the door pillar, to dislodge the friction post. Two square plastic post latches locate the nose trim to the trim panel. Carefully pull the nose trim, to unhook and separate it from the trim panel.



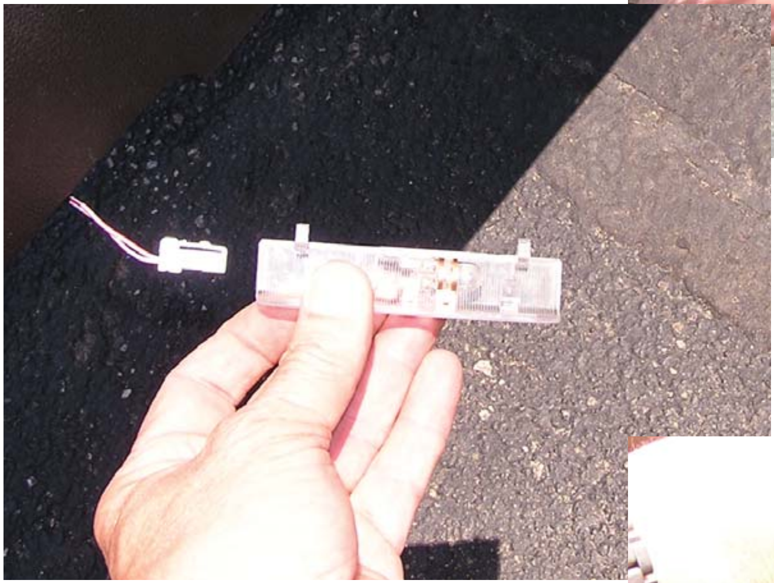
6. Under the latch release handle is a flat plastic trim piece, retained by a latch ear at the rear of the piece. Release the latch by prying forward with a small flat blade screwdriver. Hinge the trim piece out at the rear and remove it. The trim piece conceals a Phillips head trim screw. Remove the trim screw.



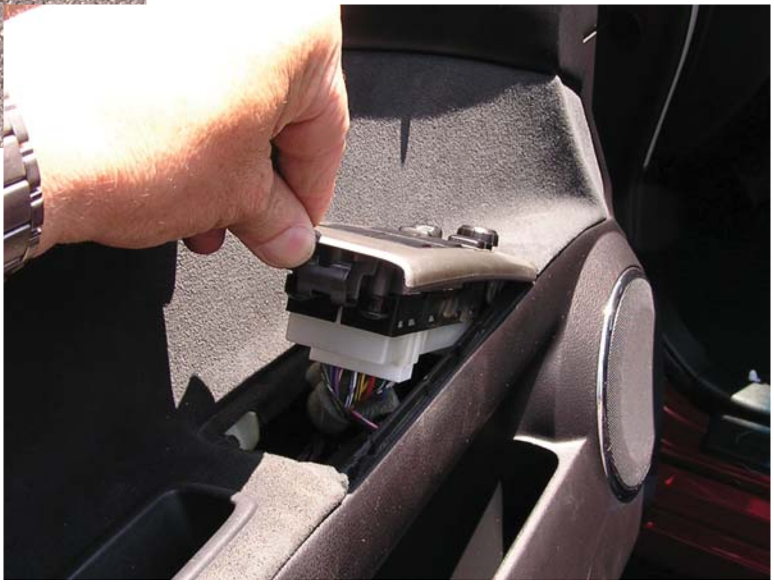
7. A rubber trim pad in the door handle grip well conceals a 10mm hex head trim screw. Remove the trim pad and remove the trim screw.



8. At the bottom of the door trim panel is a clear plastic courtesy light fixture. It is retained by a latch ear at the top and two hooks at the bottom. Use a small flat blade screwdriver at the top of the fixture, to gently pry the fixture downward. This will unlatch the top of the fixture. Hinge the fixture out and down, to free the bottom attachment hooks.

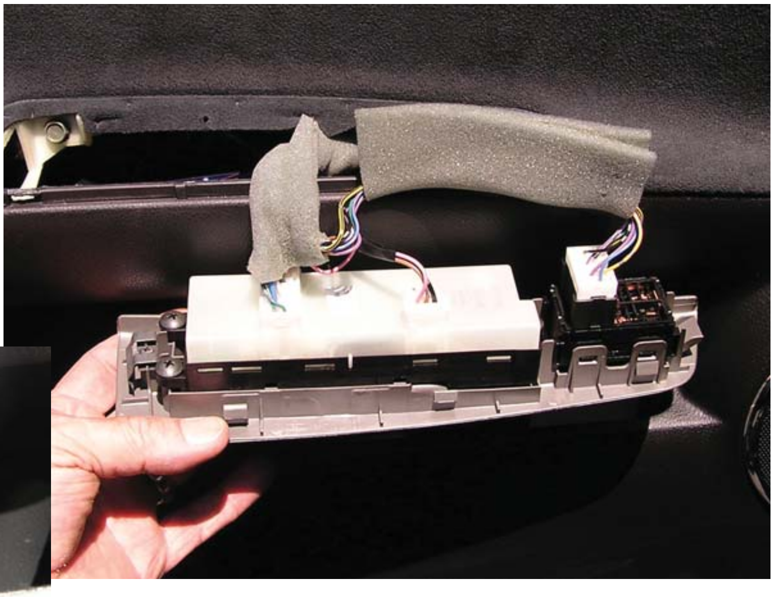


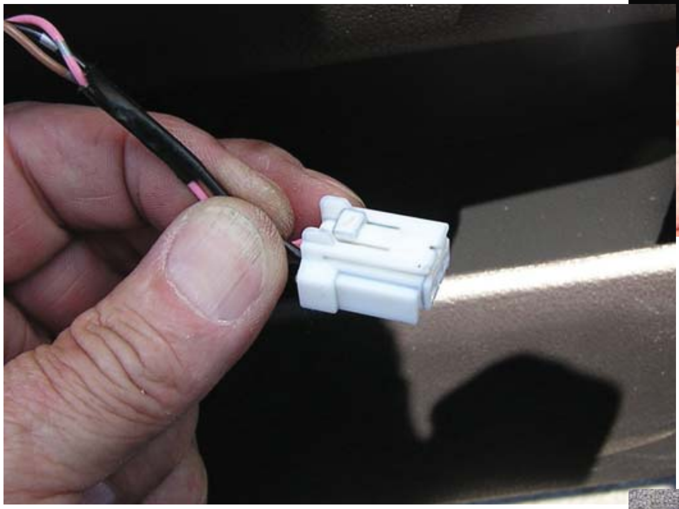
9. The light fixture is tethered to the door by an electrical connector. Release the electrical connector by compressing the compression latch. This will separate the fixture from the electrical harness.



10. The electrical control panel for the electric windows, remote mirrors and door locks is retained by a flat metal compression latch at the rear of the panel. Slip a flat trim bar under the rear edge of the panel, and press the latch forward. Do not pry this panel, as the latch is formidable. Press the latch plate forward, and lift the rear edge of the panel up. The forward end of the panel is retained by a plastic hook fastener. Hinge the rear edge up to release the hook at the front of the trim panel.

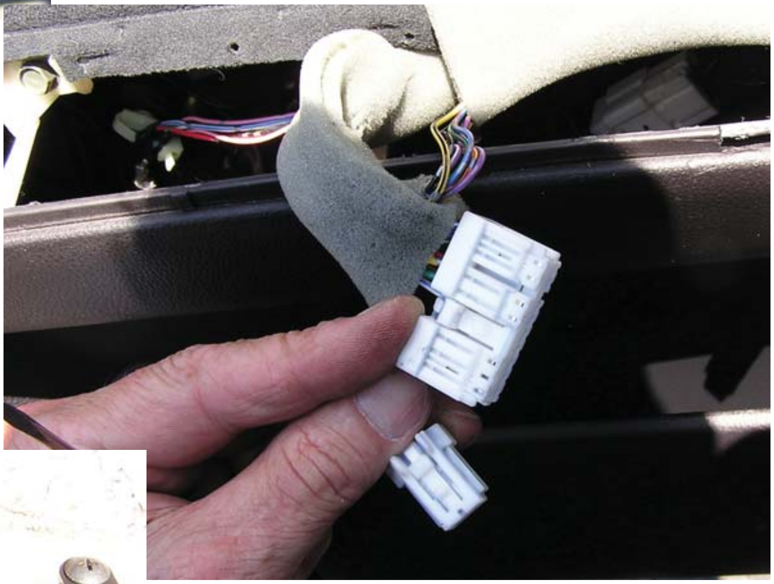
11. The electrical control panel is tethered to the wiring harness by three electrical connectors. The electrical connectors are secured by compression latches. Release the compression latches carefully, to separate the electrical connectors from the switch body.

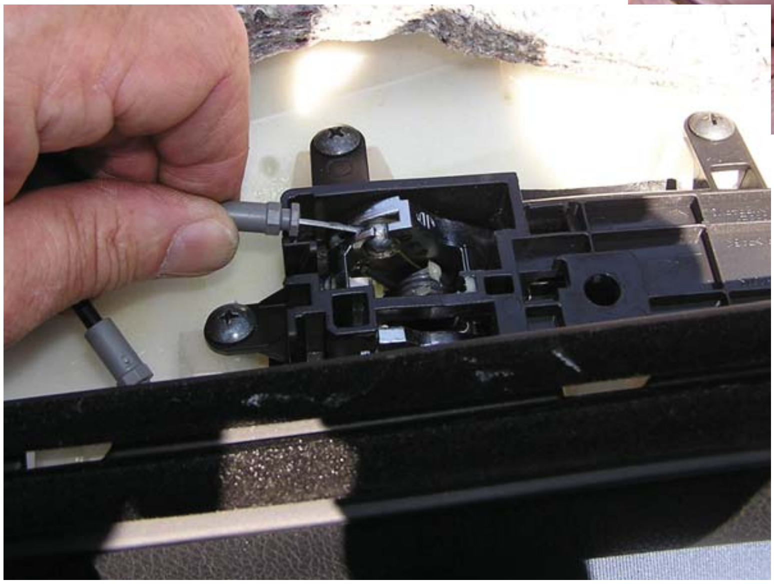




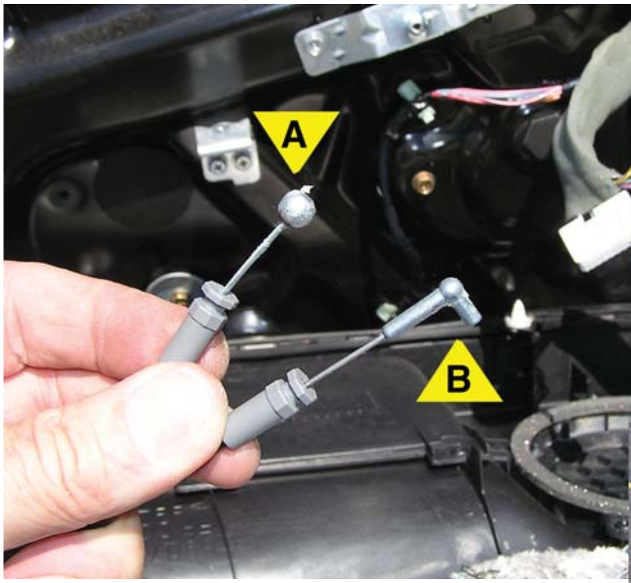
12. The compression latch on one of the electrical connectors. The latch must be compressed to release the connector. A small flat blade screwdriver can be used to push the latch inward while pulling the plug body. Do not pull on the wires, as they will pull out of the connector.

13. The plastic retaining latch on the side of the large plug body. Compress the latch to release and separate the plug from the switch panel. The switch panel can be set aside. Push the wire harness into the door panel, so it will not catch on the panel as it is removed. Pry the trim panel away from the door body with a flat trim bar. Start at the bottom rear corner of the panel, and work around the panel carefully, to dislodge all friction posts. Lift upward on the trim panel to unhook the top edge of the panel and separate it from the metal door body.



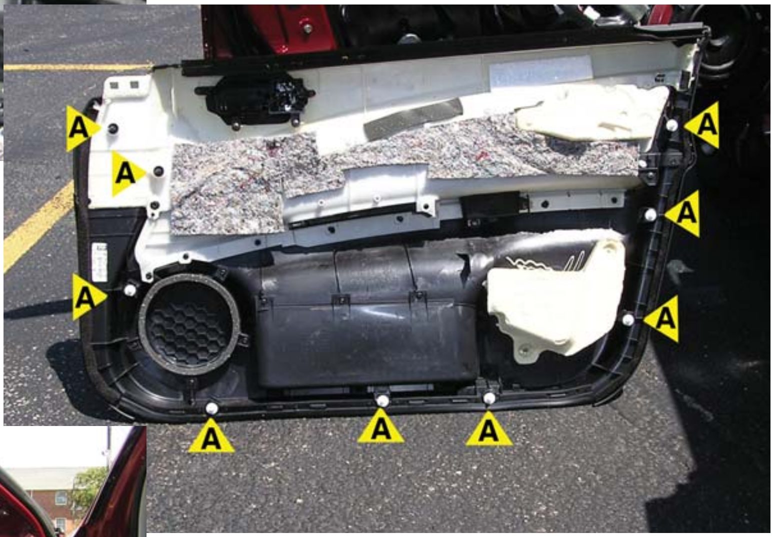


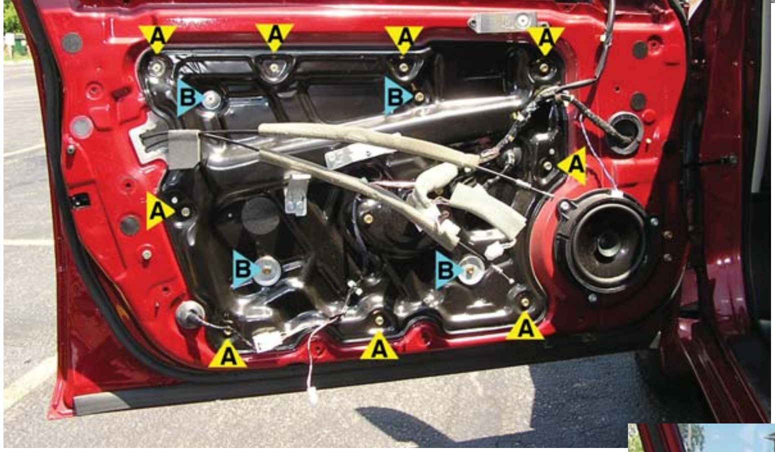
14. The trim panel will be connected to the latch release and lock/unlock cables. The latch release and lock control cables can be released from the latch handle and lock control lever by lifting the cable end connector out of its retaining socket and rotating the cable to the removal position.



15. The latch release and door lock/unlock cable ends. The latch release cable, "A," has a ball end. The lock/unlock cable "B" has a right angle cable end. Remove the cables from the latch lock assembly, to free the trim panel from the door body.

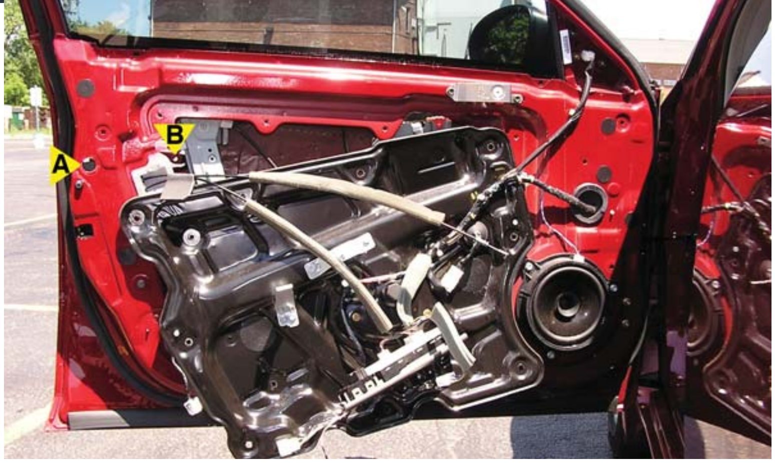
16. The inside of the trim panel. The trim panel was secured to the door body by nine plastic friction post type fasteners. Insure that all fasteners are in the door trim panel. Sometimes, the fasteners will separate from the trim panel and be in the metal door body. Replace them into the trim panel now to speed reassembly.



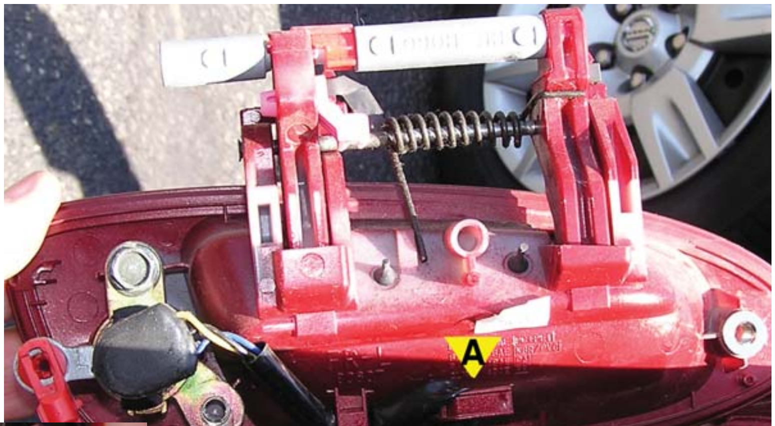


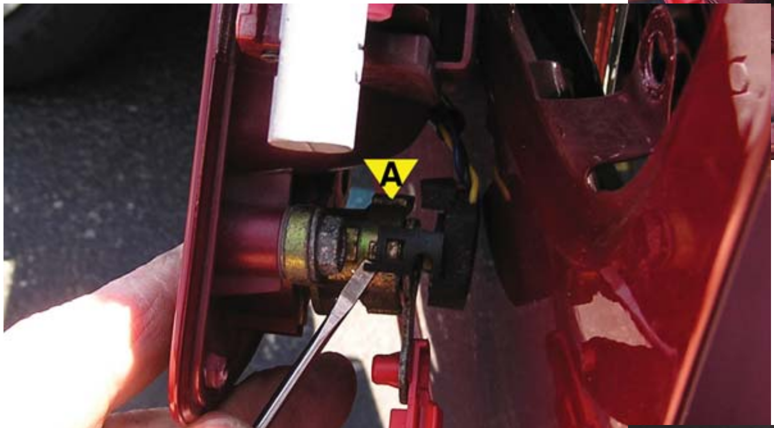
17. With the trim panel removed, we find that the exterior lift handle/lock assembly cannot be removed without first removing the metal inner door panel. The lift handle assembly is secured by two 10mm hex head machine screws. The forward attachment screw is concealed by the metal panel. The inner metal panel is secured to the door body by nine 10mm Phillips/Hex head sheet metal screws, "A." Four 10mm Phillips/Hex head sheet metal screws, "B," attach the window regulator tracks to the inner metal door panel. Remove thirteen screws to free the metal panel from the door body.

18. The inner metal door panel does not need to be completely separated from the door body. Allow the panel to hang down. This will allow us to access the inner door latch linkage and forward handle attachment screw. Disconnect the exterior handle linkage from inside the door. Use a 10mm box end wrench to remove the forward handle attachment screw at "B" in the photo. There is a clear plastic adhesive moisture barrier "A" covering the rear handle attachment screw access hole. Use a 10mm socket and long extension to remove the rear handle attachment screw. Hinge out the bottom of the lift handle assembly, to see and release the lock cylinder linkage clip. Separate the linkage and remove the lift handle assembly from the exterior door panel.

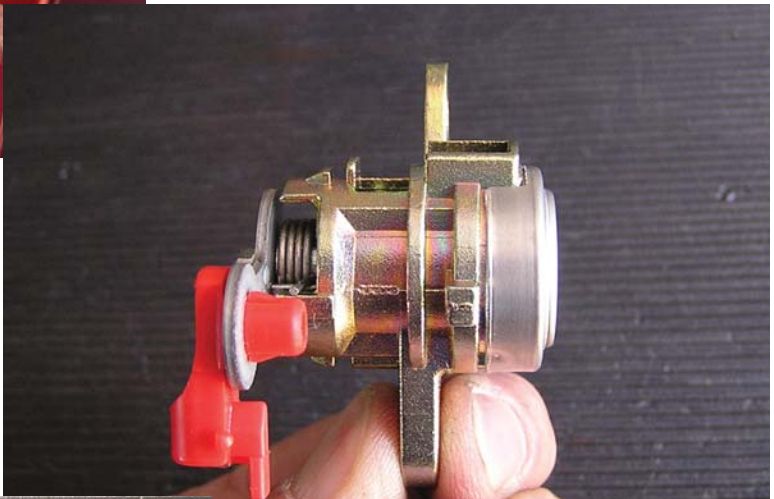


19. The lift handle and lock cylinder assembly is closely tethered to the door by a wiring harness. The harness passes under two hooks, at "A." Unhook the harness from the retaining hooks, to gain a little slack in the harness. Remember to replace the harness as you found it when reassembling the lift handle to the door. This is necessary, to prevent the wires from chafing on the window regulator. There is very little clearance inside the door.

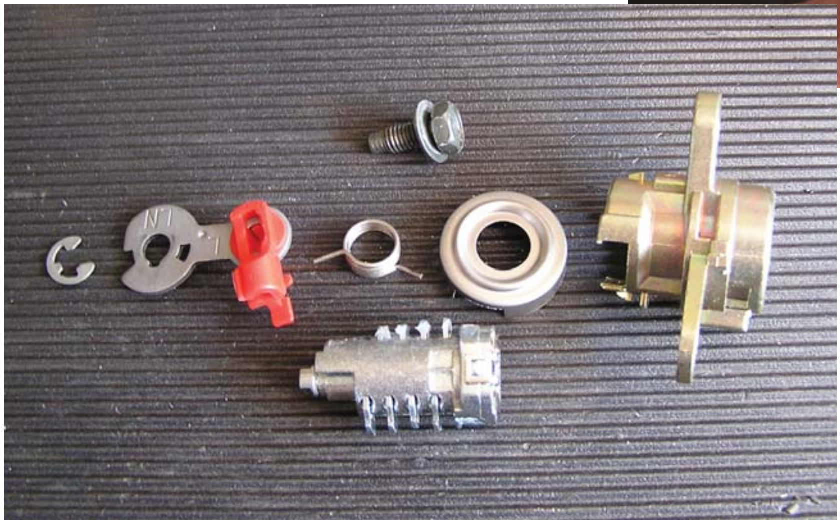




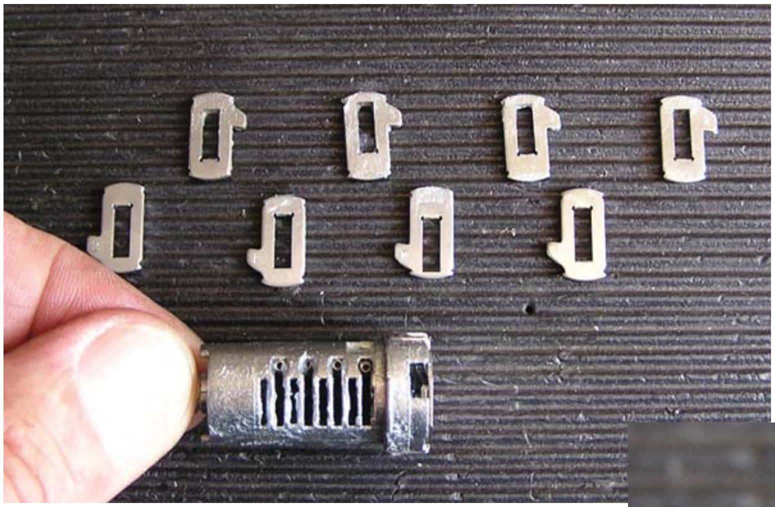
20. Remove the electrical switch from the rear of the lock cylinder, to separate the lift handle assembly from the door. The switch body is retained by two stirrup clips. Lift the clips gently, with a small flat blade screwdriver, to unlatch and free them from the rear of the lock cylinder.



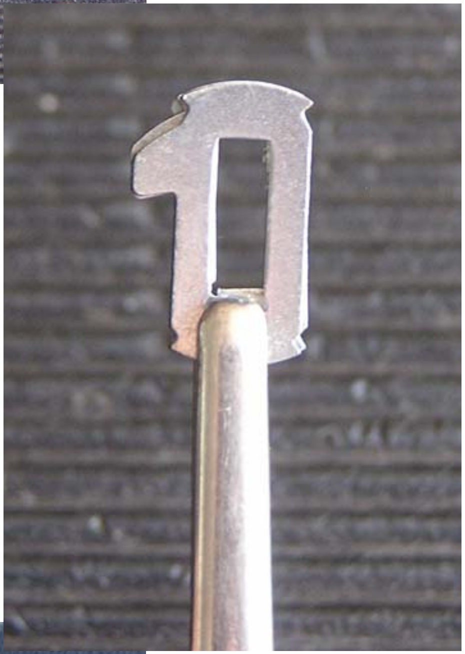
21. The door cylinder uses an easy off reusable cylinder cap. If the cap is damaged, ASP cylinder face cap P-16-213 is correct for this cylinder.



22. To disassemble the door cylinder, remove the lock pawl "E" clip, lock pawl and centering spring from the rear of the cylinder. Gently pry the face cap from the front of the cylinder. The lock plug is removed out the front of the cylinder. This is a "true double sided" cylinder. There are eight combinating wafers, representing positions 3–10 on the key.



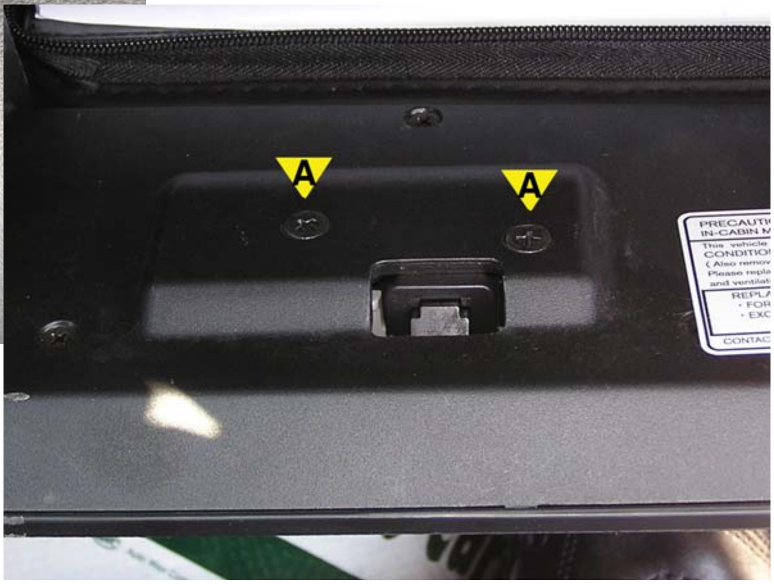
23. The combinating wafers disassembled from the lock plug. The wafers are number stamped to indicate the correct cut depth. The wafers are, right to left (shoulder to tip): 21321123. These are the cuts for positions 3-10 of the key. The shoulders of the #2 wafers are larger (higher on the wafer) than the shoulders on the #1 wafers. The #2 wafer shoulders are .025" higher than those of the #1 wafers are. This prevents the wafer bitting from rising in the keyway, higher than the #1 wafers. The function of the "stepped wafer ear" is to make the #1 and #2 wafers indistinguishable in the keyway, preventing conventional reading attempts. The #4 wafers are similarly modified, to make it impossible to distinguish a #3 wafer from a #4 wafer when viewed in the keyway. Reading the wafers of this cylinder, through the keyway, will show only to depths. They are: #1 or #2 and #3 or $4. Hold onto your Vise-Grips cowboy. At the end of this article, we're going to show you a "work-around" to defeat this problem.



24. A #1 and #2 wafer are perfectly aligned, one over the other. The bitting of the #2 wafer, in the rear, is seen to be higher than the #1 wafer at the front. Notice also, that the spring ears, at the left, are different heights. The wafer at the rear, a #2 wafer, has a larger shoulder. It is .025" higher than the #1 wafer in front. This difference prevents the #2 wafer from rising in the keyway, to identify the bitting as a #2 depth. The #1 and #2 wafers are indistinguishable in the keyway. Similarly, the #3 and #4 wafers are also indistinguishable. When reading this cylinder, you will observe only two bitting heights in the keyway. They are: a #1 or #2, and a #3 or #4. This is not to be redundant, but rather to further illustrate and emphasize the concept as clearly as possible.

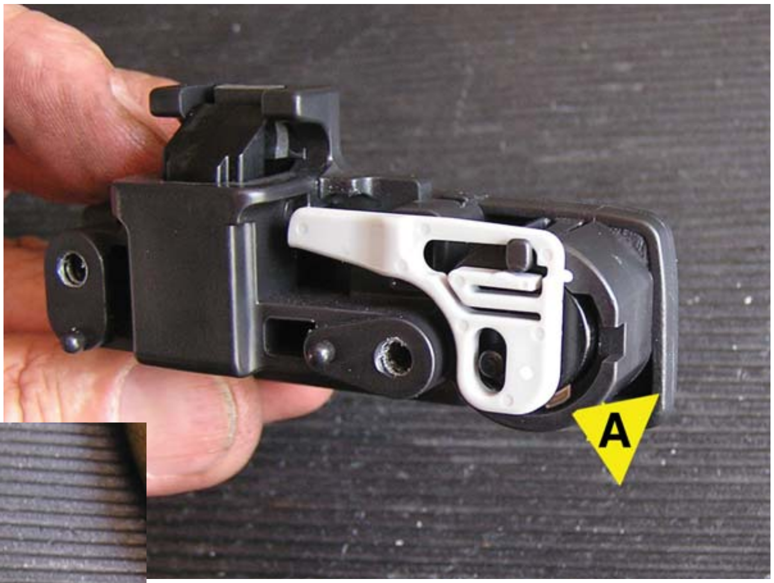
Glove Box Lock

25. The Nissan Altima is equipped with a locking glove box.



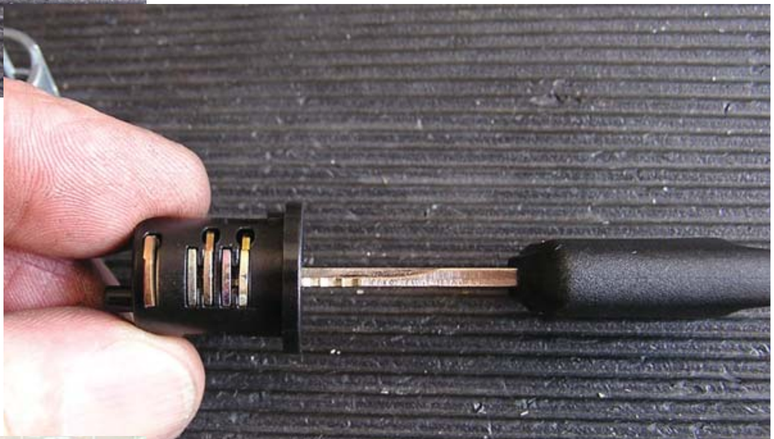
26. To disassemble the paddle type glove box latch assembly from the love box lid, in Photo #24, remove two Phillips head trim screws, "A". The assembly will drop out of the lid.

27. To remove the plug from the glove box latch assembly and depress the brass plug retainer “A,” with a pick tool or small flat blade screwdriver. Remove the plug out the front of the cylinder. You may have to pick the lock right to access the retainer. It is not necessary to have a key in the keyway.



28. The plug is inside a metal “cage.” At this point, the wafers are retained in the plug by the plug cage. Pick the wafers down, one at a time, from front to back, as you remove the plug from the plug cage. This is a “true double sided” cylinder, with wafers alternating up and down.

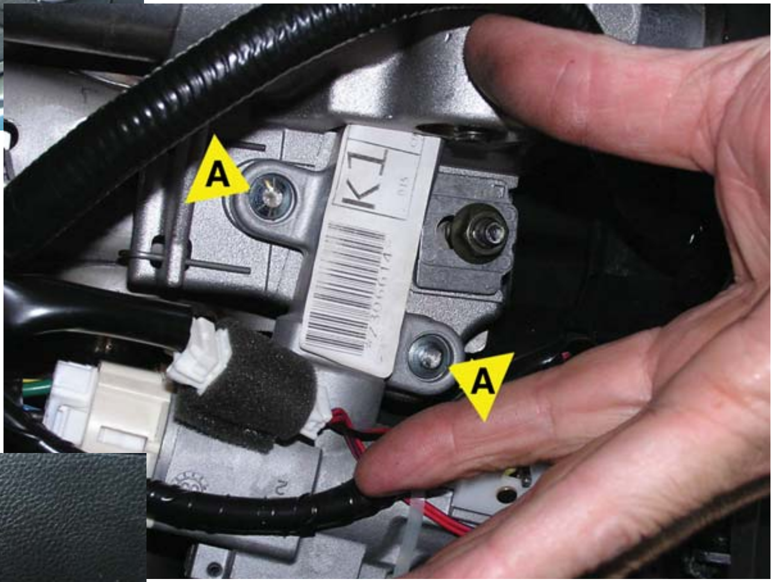
29. With the plug removed from the plug cage, they will not be retained in the plug. Use care when disassembling the plug, to avoid dropping the wafers and springs out of order. The wafers are number stamped to indicate the correct cut depths. The glove box cylinder is “TIP” gauged. It has wafers in positions 7-10. In this case, the indicated depths are: 1123.



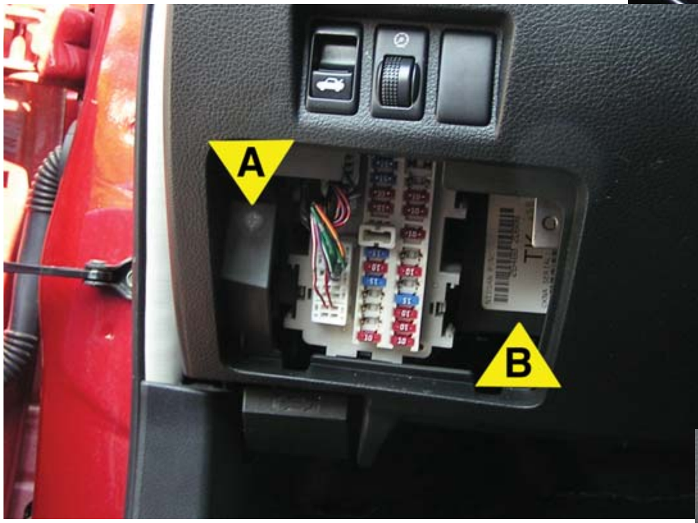
Ignition Lock

30. The ignition cylinder is mounted in the dash, to the right of the steering column. It is surrounded by a removable black plastic ring. This ignition does not have an active retainer, or poke hole for removal, and the dash is one piece, all the way to the kick panel. This ignition will remove from the underside of the dash.

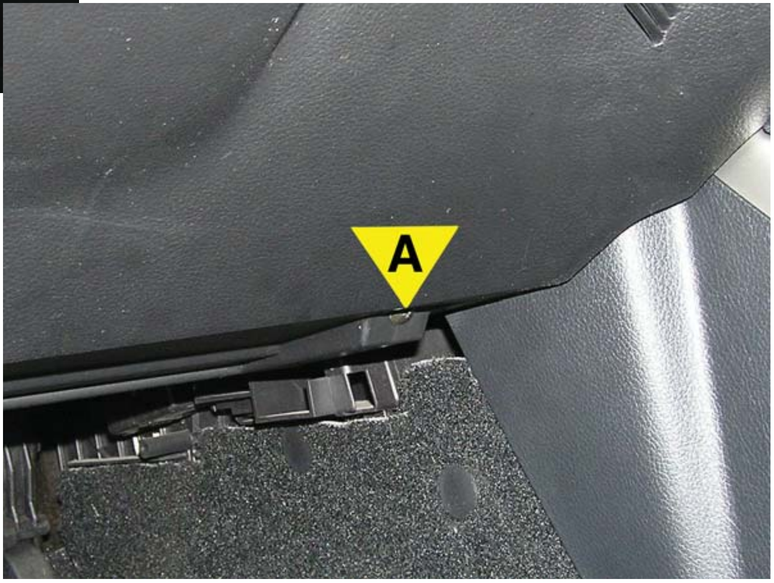
31. The ignition has a lighted bezel, which is illuminated with the courtesy lights, as the door is opened. There is no advantage to removal of the bezel or plastic trim ring.



32. The ignition lock cylinder assembly and associated electrical components are removed as a single unit. The assembly is attached to the column housing by two "headless" machine screws, "A." Use a sharp "prick punch" or awl and a small hammer to rotate the screws counterclockwise to loosen and remove them. There is clear access to the underside of the ignition lock assembly by removing the plastic kick panel and metal bolster.

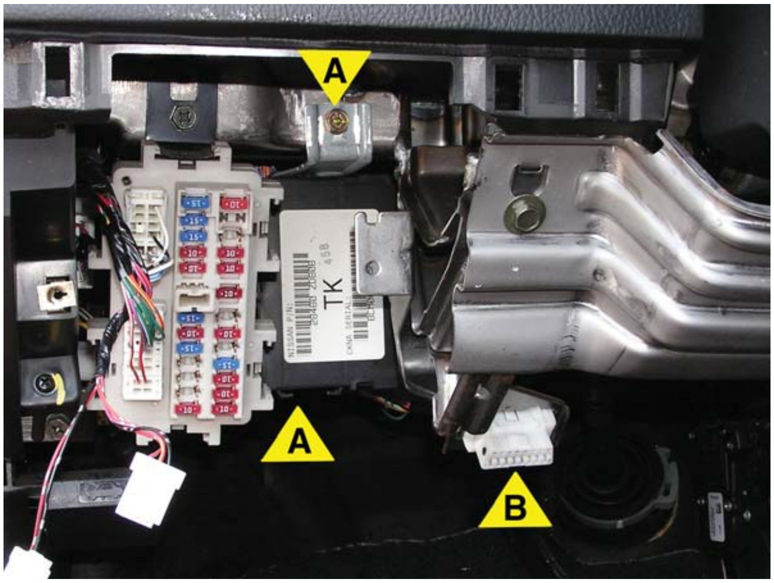


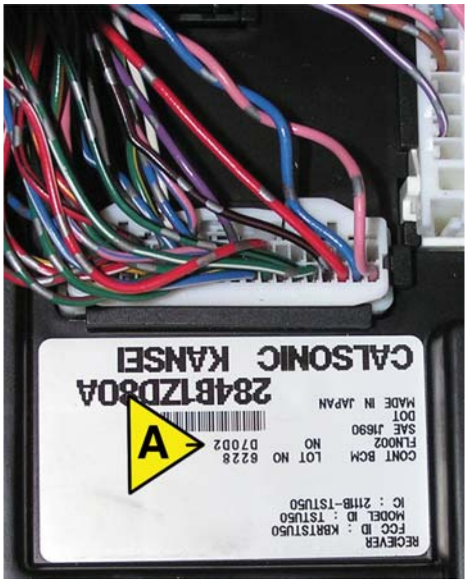
33. The rigid plastic kick panel trim is secured to the under dash framework by two Phillips head trim screws, at the bottom, and two flat friction catches, at the top. Remove the fuse panel access door at the lower left corner of the dash to access the left trim screw, "A." Remove the trim screw. In this photo, we can see the electronic security control module, "B." It is to the right of the fuse panel.



34. A second Phillips head trim screw, "A," secures the right side of the kick panel. Remove the screw. Pull the kick panel straight back (toward the rear of the car). The flat metal friction catches will disengage from the metal framework of the dash. Be careful not to break the plastic locating tabs on the kick panel, as these friction catches are tight. The kick panel will be tethered to the wiring harness by two electrical plugs. They are: the electric trunk release, and dash illumination dimmer control. The plugs use the same compression latching arrangement as those found in the door electrical control panel. Carefully depress the plastic retaining latches to separate the harness plugs from the switch and dimmer controls. This will free the kick panel from the harness. Set it aside

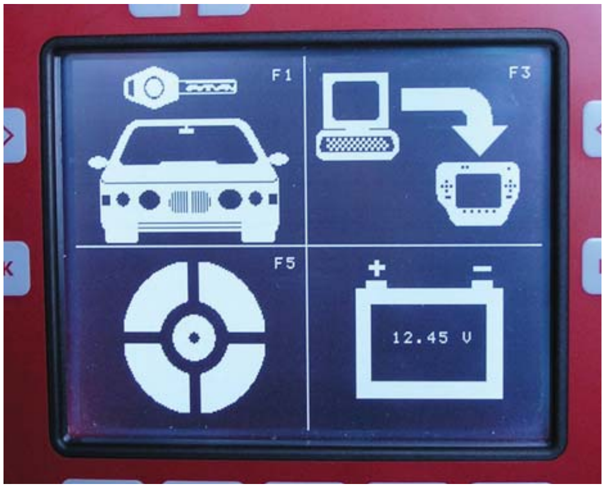
35. The electronic security module is mounted on a metal frame, secured by two Phillips/Hex head self-tapping screws, "A." The label on the front of the security module does not reveal the information we need to find the P.I.N. number for this vehicle. Remove the mounting screws and carefully reverse the module, to read the label on the opposite side. In addition, this photo shows the location of the OBD2 port "B," to the right of the security module.

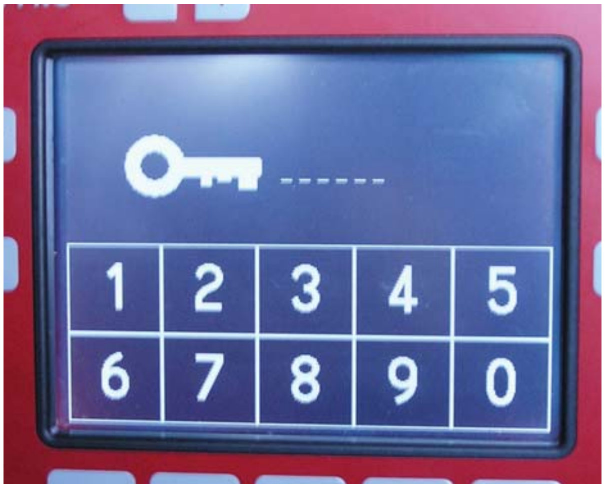




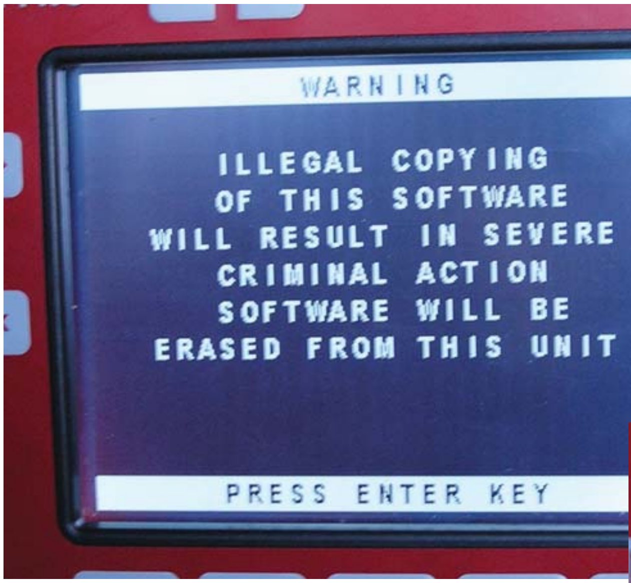
36. The label on the rear of the security module shows the number "A," which will be used to find the P.I.N. for this vehicle. The number is: D70D2. The five-digit number (D70D2) is decoded using the Auto Diagnostics™ Super Code program. The program runs an algorithm on the five-digit coded number, and returns a four-digit number, which will be our P.I.N. code. In this case, the program returned the code: 6075. The T-Code programming device manual identifies the system used on this vehicle as: "Type 4." In some cases, the coded P.I.N. number can be found using the T-Code, which eliminates the need to remove the module. Sadly, this vehicle did not have that facility. As you can see, some disassembly was required. An operating mechanical key was made, over an X237 work key, using cut information gained by disassembly of the door cylinder. The cut information for positions 3-10 was entered into the InstaCode program, using the "find bitting" feature, to determine the cuts for positions 1 & 2. When the correct mechanical information was found and confirmed in the ignition, using the work key, it was duplicated over the correct transponder blank for programming. The InstaCode program indicated that the correct "Code" for this vehicle was 19814. This information and the four-digit P.I.N. number was recorded and given to the customer, for future reference. At this point, we have a working mechanical key and the P.I.N. number. All that remains is to program the new key to the vehicle.

37. The T-Code Pro has been connected to the OBD2 port, identified earlier in this article, and powered up. The T-Code Pro manual indicates that a Black dongle, Dongle "A," is to be used. The first screen gives us three options and a piece of important information. The lower right quarter of the screen displays the battery voltage. The battery voltage is 12.45 volts. This should be sufficient for the programming procedure. Select the programming option by touching the upper left quadrant of the touch screen.



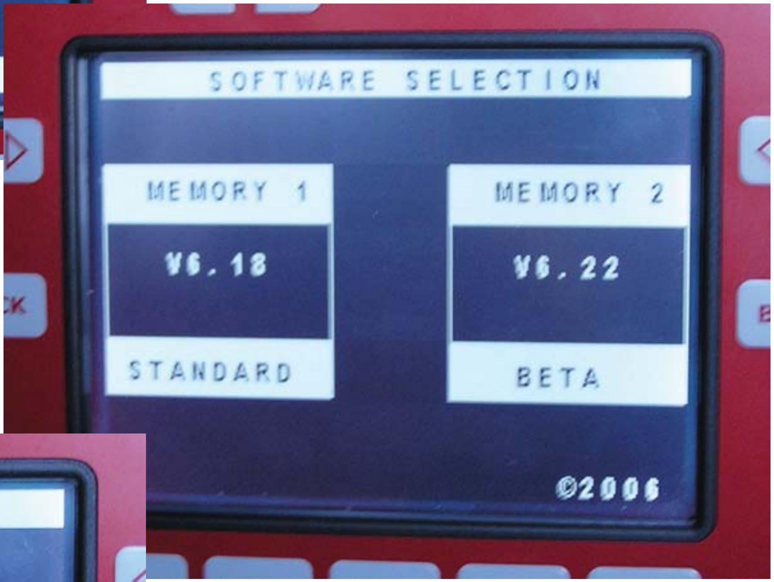


38. The second screen displayed is the device security screen. Enter your six-digit security code or PIN, and touch "enter" to continue.

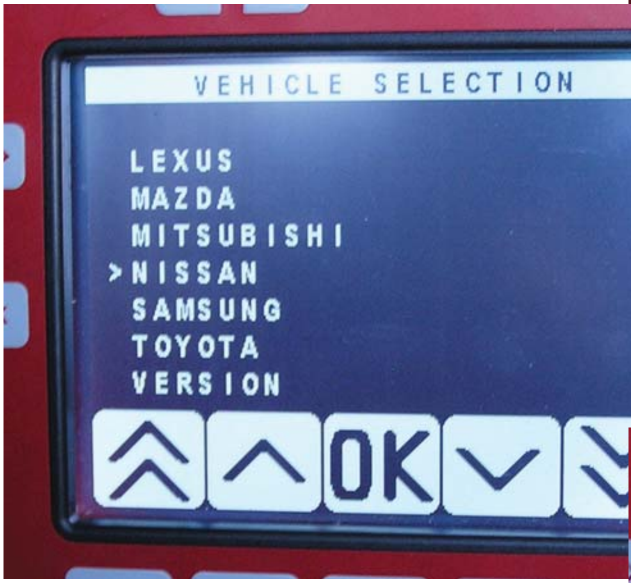


ILLEGAL COPYING OF THIS SOFTWARE WILL RESULT IN SEVERE CRIMINAL ACTION SOFTWARE WILL BE ERASED FROM THIS UNIT

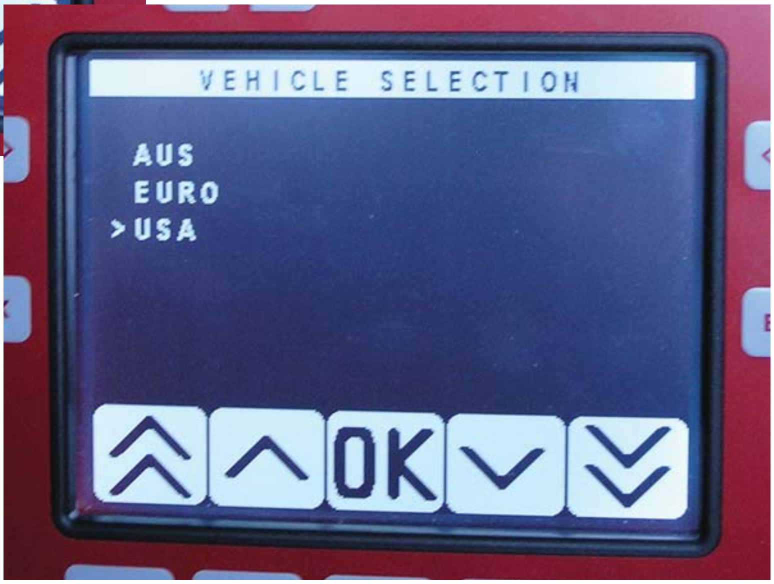
39. Security warning! Security warning! Severe criminal action! Software will be erased! Check over your shoulder, then press the enter key.



40. The next screen offers us the option to run the Standard or Beta software. Select the standard software by pressing the touch screen over the "Memory 1, Standard" box.

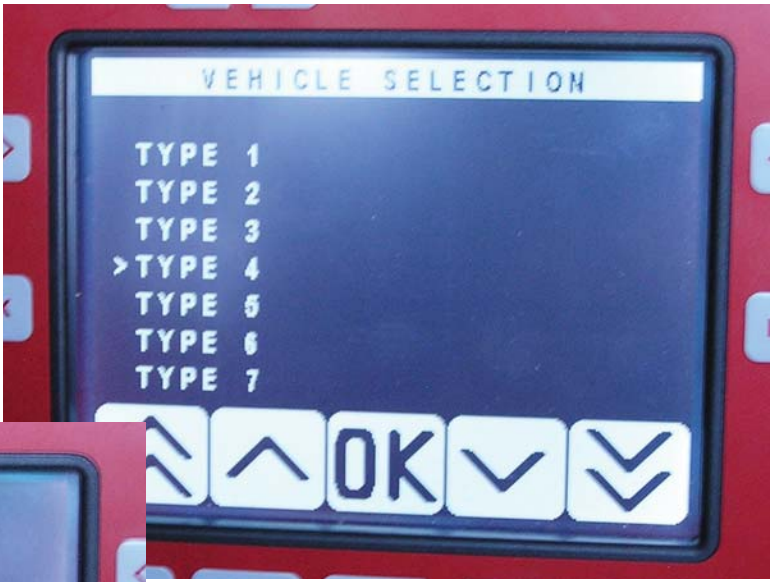


41. Use the scroll arrows to move the cursor up or down to select the auto manufacturer. Photo shows "Nissan" selected. Press "OK" or "Enter," to continue.

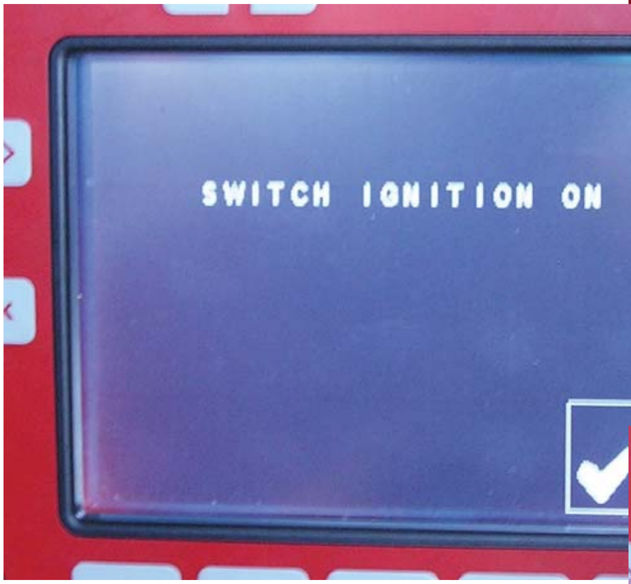


42. Since we are working on a USA vehicle, manufactured for the North American market, select USA using the up or down arrows. Press "OK" or "Enter," to continue.

43. Nissan uses a number of transponder systems. The T-Code instruction manual identifies the 2006 Nissan Altima as a "Type 4" system. Use the up or down arrows to move the cursor to "Type 4," then press "OK" or "Enter," to continue.

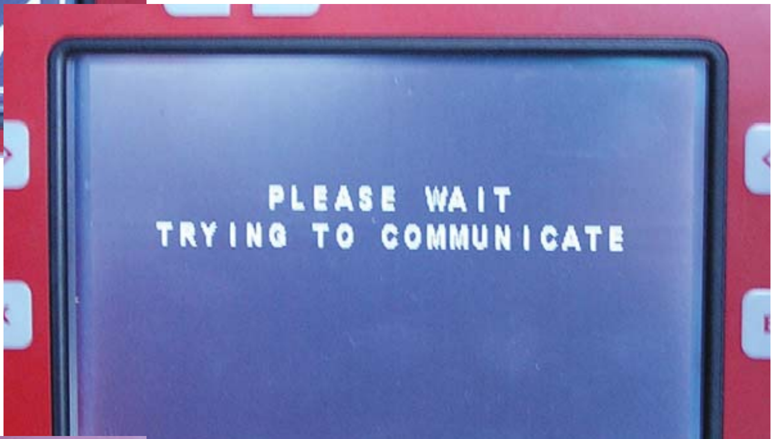

VEHICLE SELECTION

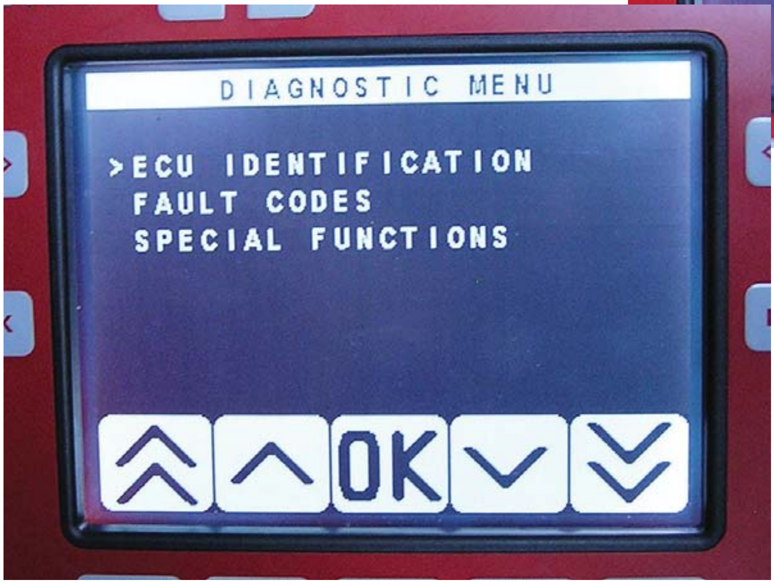
TYPE 1
TYPE 2
TYPE 3
>TYPE 4
TYPE 5
TYPE 6
TYPE 7


SWITCH IGNITION ON

44. The T-Code Pro instructs us to insert the unprogrammed key and "Switch the ignition to ON." Turn the key to the ON/Run position, and then press "OK" or "Enter," to continue.

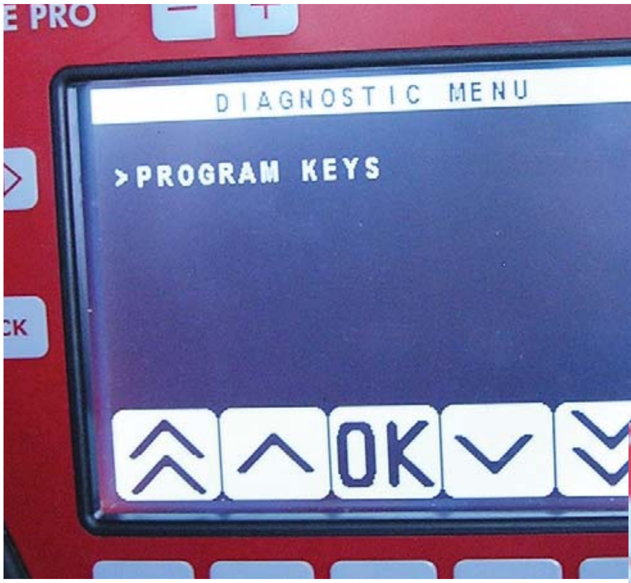
45. At this point, the security module is being addressed by the T-Code Pro programming device. This may take a few moments.


PLEASE WAIT
TRYING TO COMMUNICATE

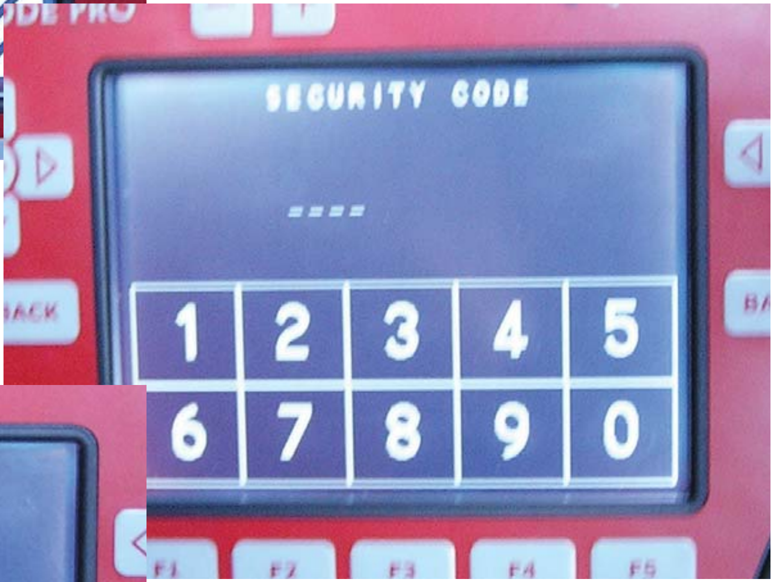

DIAGNOSTIC MENU

>ECU IDENTIFICATION
FAULT CODES
SPECIAL FUNCTIONS

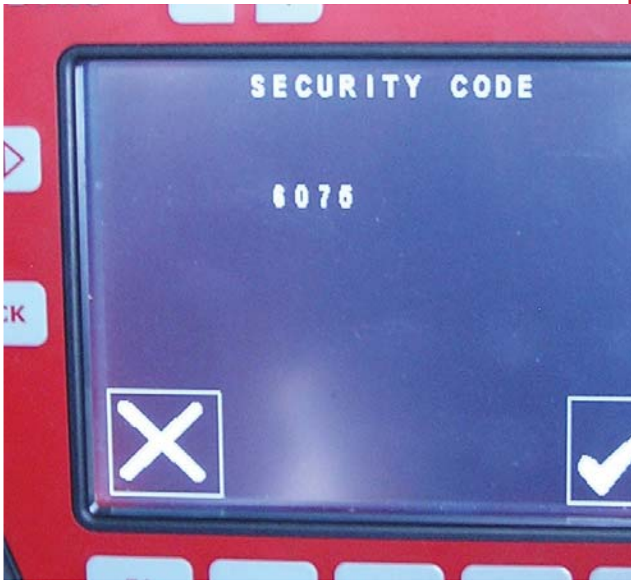
46. The screen you see suggests that the ECU module can be addressed by the T-Code, to find the serial number. For this auto, the module did not return the number as requested. Some vehicle security modules may not have the facility to allow this communication. This one did not. Obtain the security code by viewing the label on the module. Use the up or down arrows to move the cursor to "Special Functions." Press "OK" or "Enter," to continue.



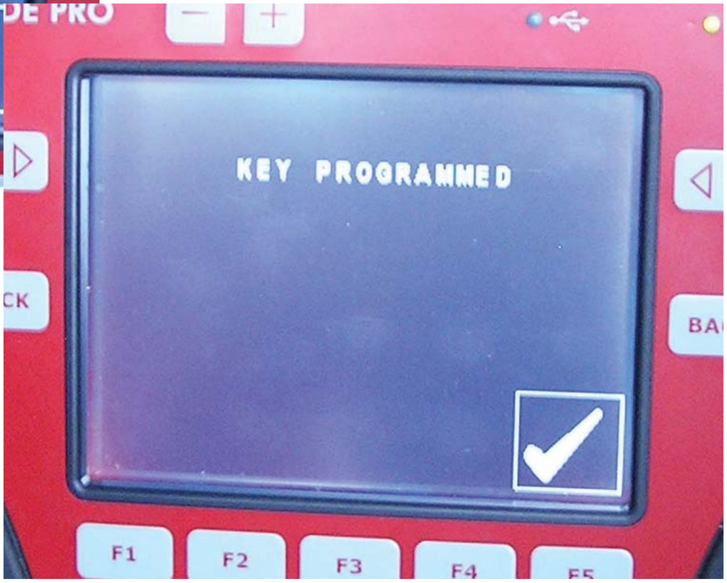
47. Under "Special Functions," we are offered only one option; "Program Keys." This Nissan transponder system will erase all keys, and program the key in the ignition as the only operating key. If you wish to program multiple keys to the vehicle, you must have them available at the time of programming. Press "OK" or "Enter," to continue.



48. The next screen requests that you enter the four-digit security code or P.I.N. number. The P.I.N. code, converted using the Auto Diagnostics Super Code Program, is: 6075. Enter the P.I.N. code using the touch screen. The number selection screen disappears after the last digit is entered. The next screen displays automatically.



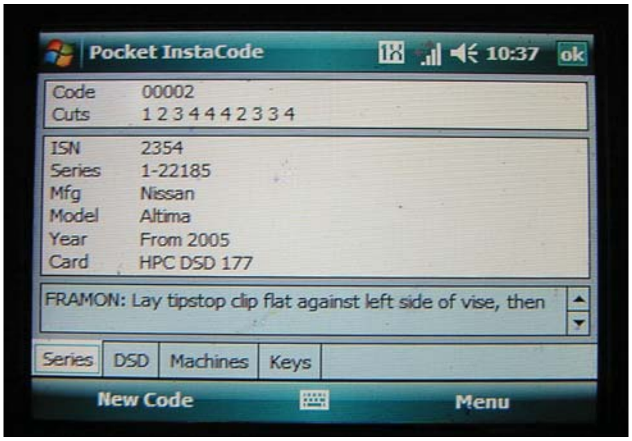
49. Press the "Check Mark," if the security code is shown correctly. If the security code is not correct, press the "X" to be returned to the code enter screen.



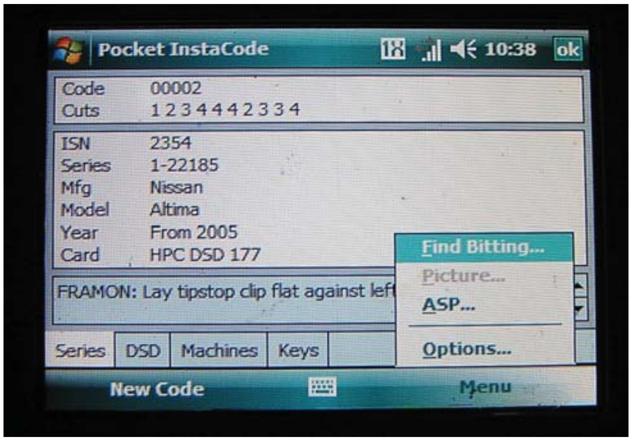
50. SUCCESS! The last screen indicates "Key Programmed." Select "Check Mark," if you want to program additional keys. Disconnect the programming device if you are finished. Cycle the key or keys in the ignition to start the vehicle and confirm your success. After looking at all the work it took to disassemble the door cylinder to find the bitting in positions 3-10, you'll appreciate this little work-around. All you need to disassemble is the glove box cylinder. Disassemble the glove box cylinder to find the cuts in positions 7-8-9-10. With this information, we can read the door cylinder to find a working door key. Then find the cuts for positions 1 & 2, to operate the ignition, as you will read below.

It is indeed correct, that the Nissan cylinders will not "read" like other wafer locks. This is because of the stepped wafer ear configuration, explained above. The following procedure lessens the sting of the stepped wafer ear. It will lead you to a complete mechanical key without disassembling the door cylinder or the ignition.

51. InstaCode on a Pocket PC. A fictitious code number, (00002) within the known code series is entered into the code panel. The manufacturer, Nissan, the model, Altima, and the year from 2005 were entered on the previous screen. Click "find" on the first screen to open the screen you see here. At the lower right side of the screen is a button that opens a menu of additional program options. Click the "Menu" button to open it.



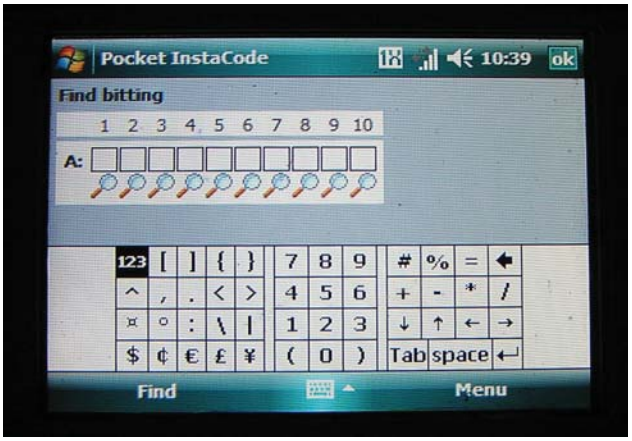
Code 00002
Cuts 1 2 3 4 4 4 2 3 3 4
ISN 2354
Series 1-22185
Mfg Nissan
Model Altima
Year From 2005
Card HPC DSD 177
FRAMON: Lay tipstop clip flat against left side of vise, then

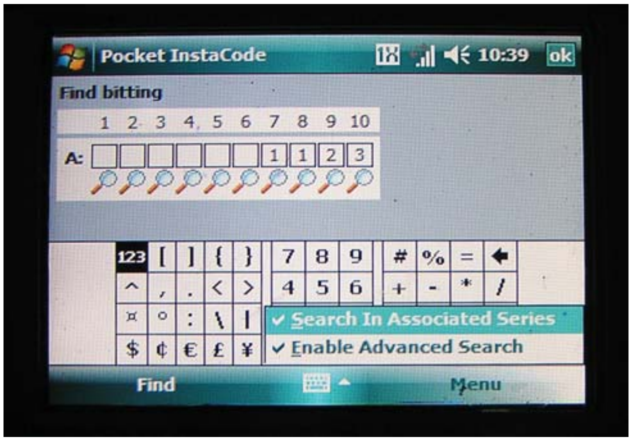


Code 00002
Cuts 1 2 3 4 4 4 2 3 3 4
ISN 2354
Series 1-22185
Mfg Nissan
Model Altima
Year From 2005
Card HPC DSD 177
FRAMON: Lay tipstop clip flat against left

52. The menu options. In this menu, we find the title "Find Bitting." Click on "Find Bitting," to open the next screen.

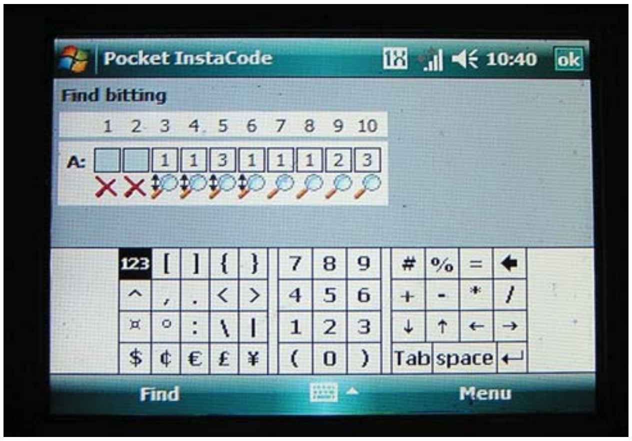
53. The Find Bitting screen. Again, the "Menu" button appears at the lower right side of the screen. Click the "Menu" button to open it.





A: ☐ ☐ ☐ ☐ ☐ ☐ 1 1 2 3

54. Under the menu for additional options you will find "Enable Advanced Search." Click the "Enable Advanced Search" button to add/enable this option to the bitting search. When you click the option, a check mark appears to the left of the selection and the menu will collapse.



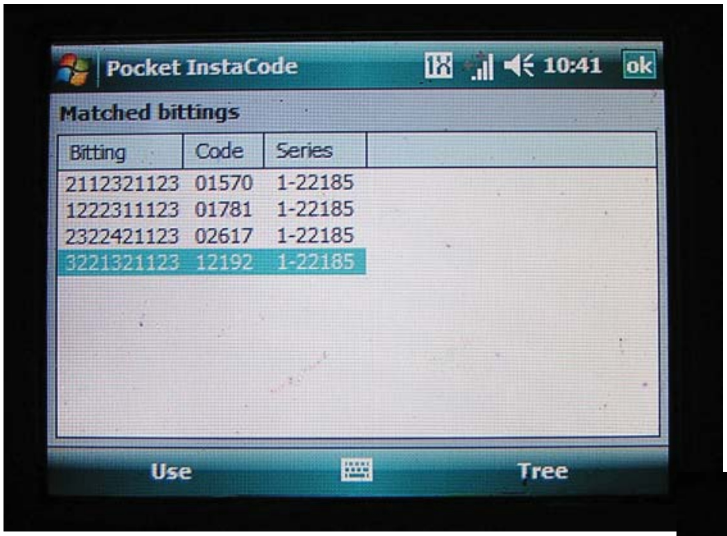
A: ☐ ☐ 1 1 3 1 1 1 2 3

55. The functionality of the advanced search option. In this window, there are ten boxes at "A," that will accept numbers from one to four. The boxes represent the ten positions on the key. The numbers entered into the boxes will represent the cut depths. The "spy glasses at the bottom indicate the search. We found that the cuts in our glove box cylinder were: 1123. These "known" cuts are entered in positions (boxes) 7-8-9-10. We don't need to search these positions, because we know the cuts in these positions.

For the "Advanced Search," click on the "spy glass for position #1. The "spy glass" will change to a spyglass with an up-down arrow. If you click a second time, the spyglass will disappear, a red "X" will appear, and the number box will be dimmed. The up-down arrow is called the "one-up" option; this option allows the locksmith to read locks with the "stepped wafer ear" configuration. In the keyway, the bitting of the wafer will be either; high indicating a #3 or #4 depth, or low, indicating a #1 or #2 depth. Read the wafers in the door cylinder to find either high, #3/#4 bitting or low, #1/#2 bitting. Low bittings will be entered as a #1. High bittings will be entered as a #3. To narrow the search, you will note that positions one and two have been set to the "red X." The search will not regard these positions. Positions 3-4-5-6 have been set to the up-down arrow, to search the code series using the indicated cut depth and a "one-up" option. Click the "Find" button to search the code series for possible cut combinations.

NLAA
1533 Burgundy Parkway
Streamwood, Illinois 60107

STANDARD PRESORT
U.S. POSTAGE
PAID
DAYTONA BEACH, FL
PERMIT NO. 224

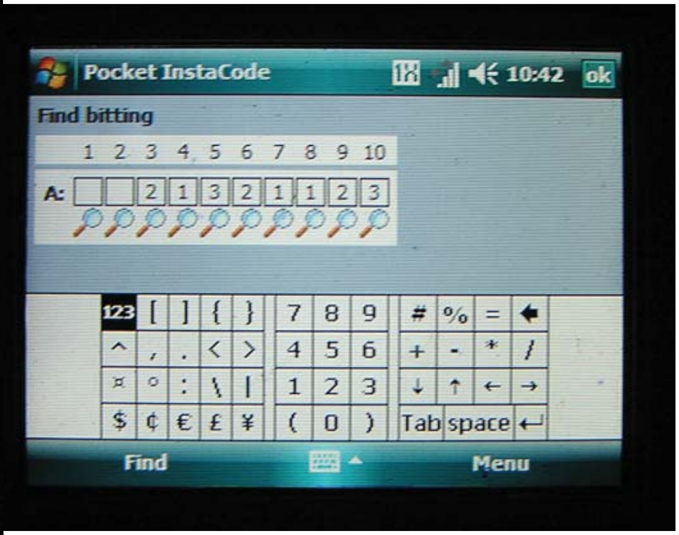


Matched bittings

Bitting	Code	Series
2112321123	01570	1-22185
1222311123	01781	1-22185
2322421123	02617	1-22185
3221321123	12192	1-22185

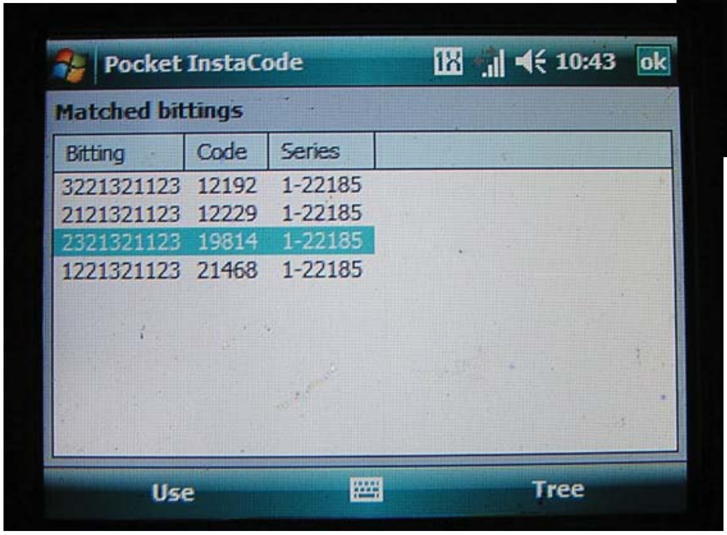
56. There are only four possible key combinations, which have cuts 1123 in the last four positions and the high low combinations entered in positions 3-6. Cut keys, on an X237 "work key" using only positions 3-10. You will find a working door key in this list. Use the cutting tree if you like, but do not cut the key in positions one and two. We'll do that in the next step, after we have determined the correct bitting for the door key. The last key in the list operated the door smoothly. Put those vise grips away. This is not impressioning. The key either works or it doesn't. In this step, we have determined the correct bitting for positions 3-4-5 and 6. The bitting is: 2132. Click the "OK" button in the upper right corner of the screen to return to the previous screen.

57. The find-bitting screen. Click on the spyglasses to remove the up-down arrows and red Xs. Enter the "known bitting depths in positions 3-4-5 and six. In our case, we have entered the numbers: 2-1-3 and 2. We have a working key with known cuts for positions 3-10. The unknown cuts in positions 1 & 2, will be the subject of our search. Click "Find" at the lower left side of the screen to initiate the search.



Find bitting

	1	2	3	4	5	6	7	8	9	10
A:			2	1	3	2	1	1	2	3



Matched bittings

Bitting	Code	Series
3221321123	12192	1-22185
2121321123	12229	1-22185
2321321123	19814	1-22185
1221321123	21468	1-22185

58. The search has returned only four possible bittings that include our known cuts in positions 3-10. Use the cutting tree or your own judgment to cut the keys on the list, over a "work key." One of the keys in this list will operate the ignition smoothly. In this case, the correct key was third on the list. Four Keys were "burned" (wasted) in the making of the complete key. Only the cut information from the glove box was required. Oh, and with a little help from InstaCode. Does that look easier than disassembling the door? I thought you'd like it.
InstaCode is "way more" than codes. It's a tool.